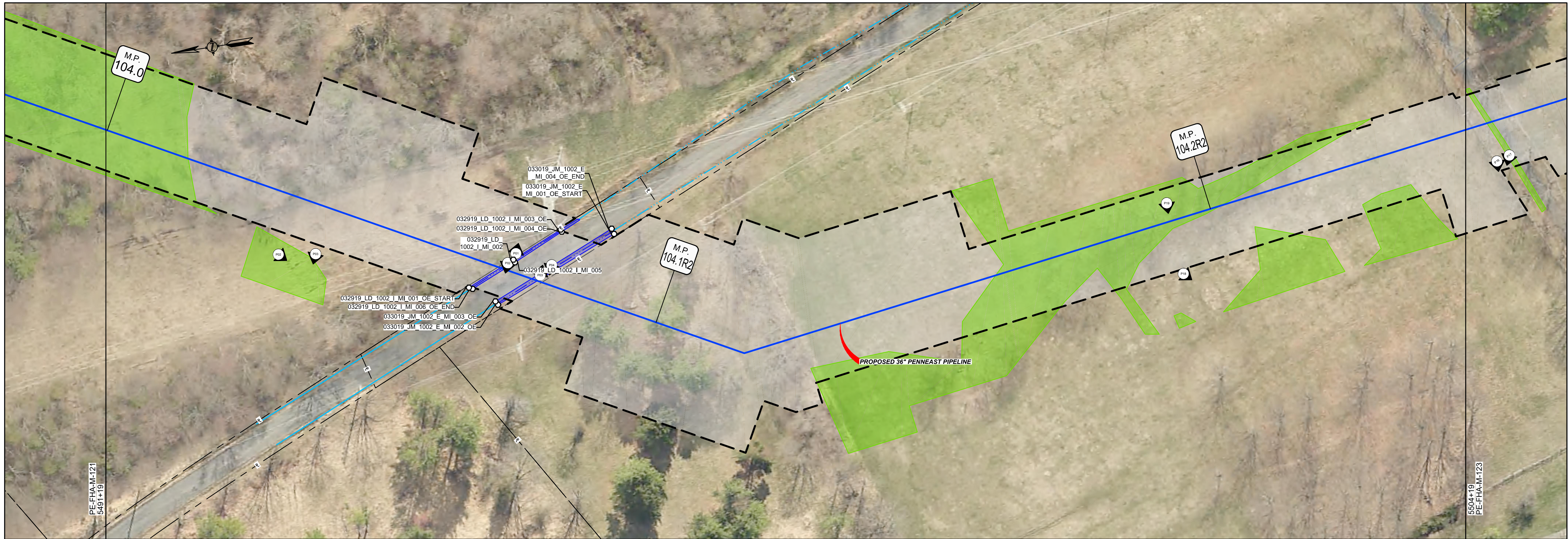
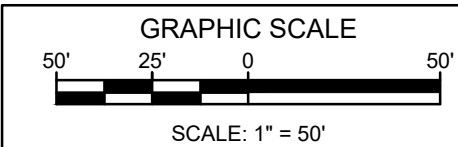
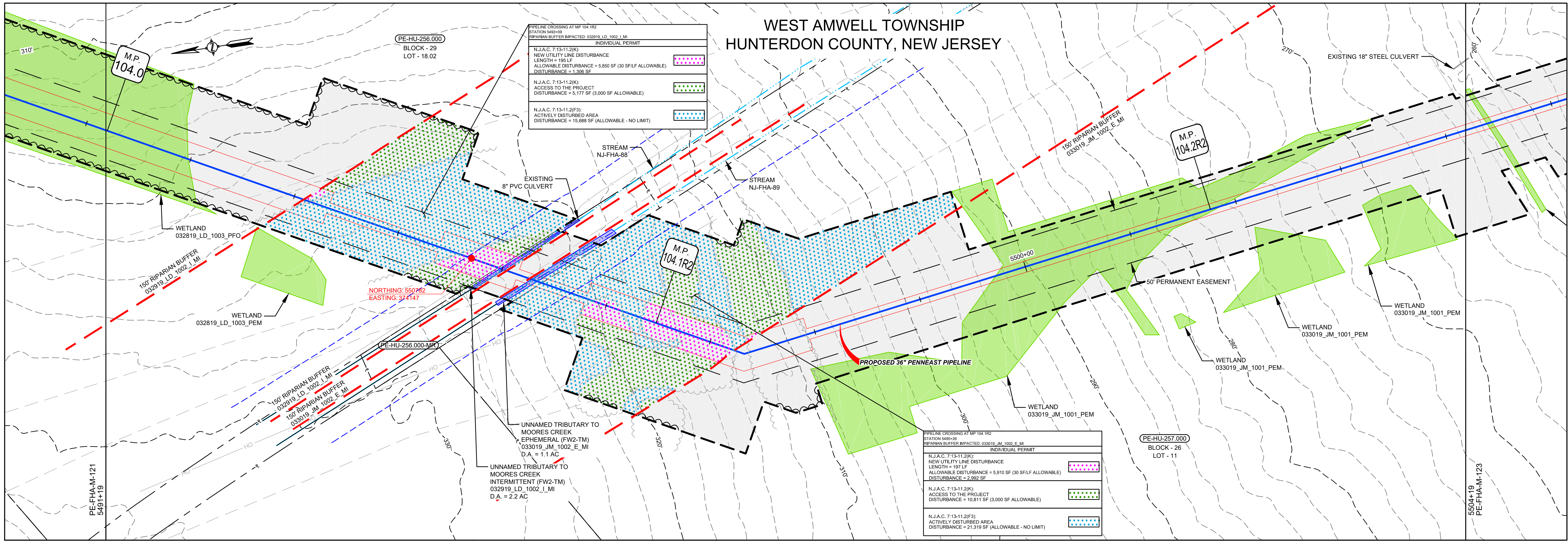






WEST AMWELL TOWNSHIP  
HUNTERDON COUNTY, NEW JERSEY



- LEGEND**
- PROPOSED PIPELINE
  - LIMITS OF DISTURBANCE
  - PROPOSED PERMANENT EASEMENT
  - OPERATIONAL CORRIDOR
  - PROPOSED TREE LINE
  - EXISTING TREE LINE
  - WETLAND (SURVEYED)
  - WETLAND (PUBLIC)
  - WATERBODY (SURVEYED)
  - WATERBODY (PUBLIC)
  - ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)
  - TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)
  - NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)
  - RIPARIAN BUFFER
  - 25' BUFFER FROM STREAM TOP OF BANK
  - STREAM CENTERLINE (SURVEYED)
  - STREAM CENTERLINE (PUBLIC)
  - LIMITS OF WETLAND DELINEATION
  - PROPERTY LINE
  - PARCEL ID WITH BLOCK AND LOT NUMBER
  - EXISTING CULVERT
  - CPP CORRUGATED PLASTIC PIPE
  - CMP CORRUGATED METAL PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - PVC POLYVINYL CHLORIDE PIPE
  - RCP REINFORCED CONCRETE PIPE
  - UNK UNKNOWN
  - EXISTING FOREIGN UTILITY EASEMENT
  - 1260' EXISTING MAJOR CONTOURS
  - EXISTING MINOR CONTOURS
  - EXISTING PIPELINE
  - OH EXISTING OVERHEAD LINE
  - EXISTING TREE
  - EXISTING FENCE
  - STATE OPEN WATER FLAG
  - PHOTO LOCATION (SEE REPORT)

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

*Thomas D. Strong* 08/01/2019  
SIGNATURE DATE

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

**MICHAEL J. DENICHILO**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 24GE05078700

*Michael J. Denichilo* 08/01/2019  
SIGNATURE DATE

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  - RIPARIAN ZONES AND WETLAND TRANSITION AREAS PROVIDED BY PAULUS, SOKOLOWSKI AND SARTOR (PS&S).
  - CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MOTT MACDONALD.

REFERENCE DRAWINGS		NO.		REVISIONS				APPROVALS			
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	CLIENT APPROVAL	DATE
PE-SSC-M-104.0R2	SUPPLEMENTAL STREAM CROSSING DETAIL	0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	RJP	7/2019		
PE-SSC-M-104.0R2	SUPPLEMENTAL STREAM CROSSING DETAIL							KEK	7/2019		
								ENG. APPROVAL	DATE		
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								MW	7/2019		

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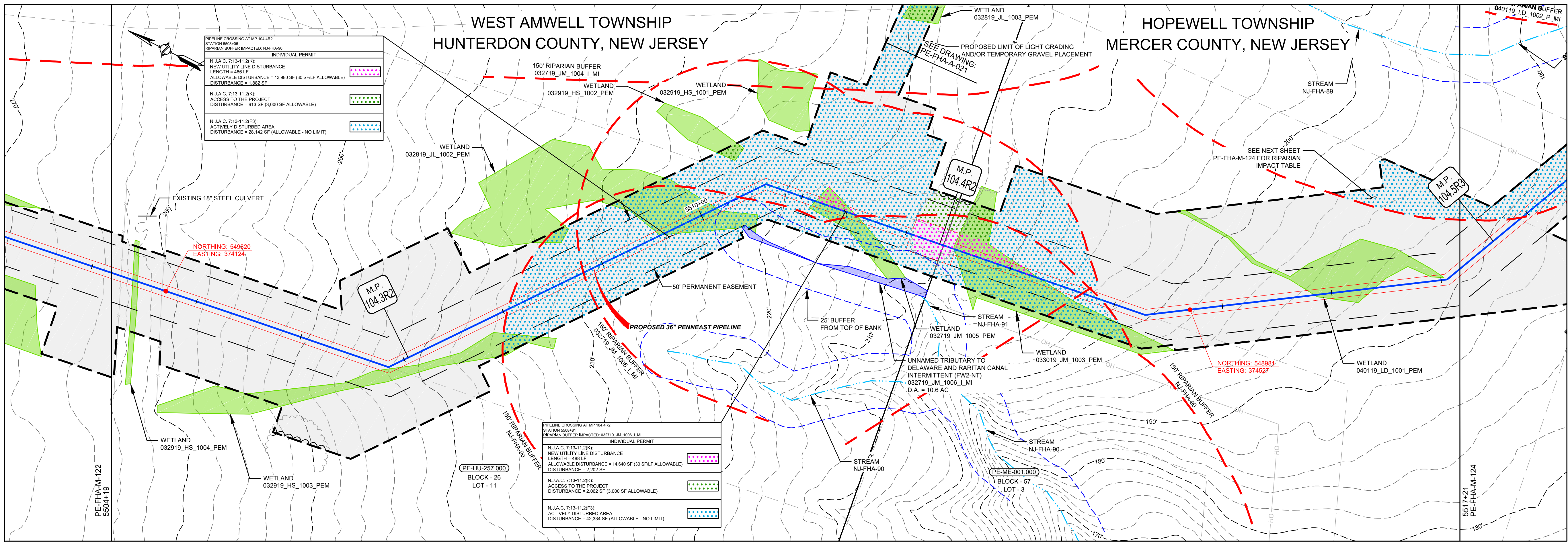
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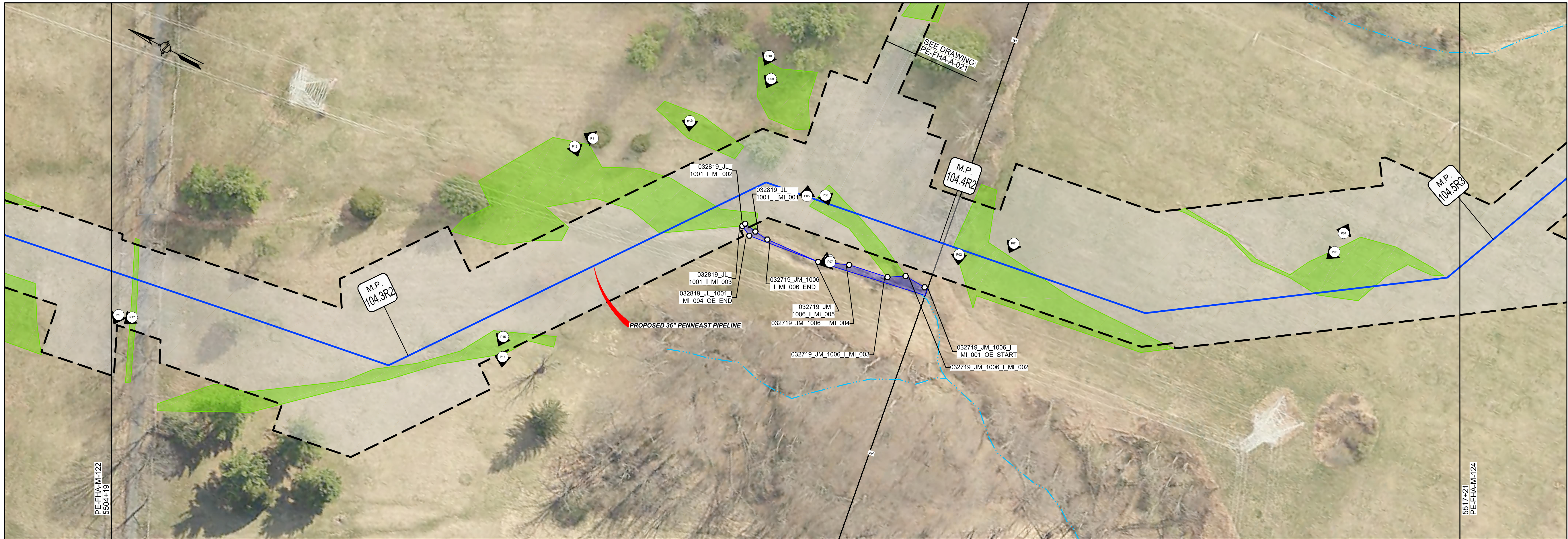
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DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	CLIENT APPROVAL	DATE
PE-SSC-M-104.0R2	SUPPLEMENTAL STREAM CROSSING										





- LEGEND**
- PROPOSED PIPELINE
  - LIMITS OF DISTURBANCE
  - PROPOSED PERMANENT EASEMENT
  - OPERATIONAL CORRIDOR
  - PROPOSED TREE LINE
  - EXISTING TREE LINE
  - WETLAND (SURVEYED)
  - WETLAND (PUBLIC)
  - WATERBODY (SURVEYED)
  - WATERBODY (PUBLIC)
  - ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)
  - TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)
  - NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)
  - RIPARIAN BUFFER
  - 25' BUFFER FROM STREAM TOP OF BANK
  - STREAM CENTERLINE (SURVEYED)
  - STREAM CENTERLINE (PUBLIC)
  - LIMITS OF WETLAND DELINEATION
  - PROPERTY LINE
  - PARCEL ID WITH BLOCK AND LOT NUMBER
  - EXISTING CULVERT
  - CORRUGATED PLASTIC PIPE
  - CORRUGATED METAL PIPE
  - HDPPE
  - HIGH DENSITY POLYETHYLENE PIPE
  - PVC
  - POLYVINYL CHLORIDE PIPE
  - RCP
  - REINFORCED CONCRETE PIPE
  - UNK
  - UNKNOWN
  - EXISTING FOREIGN UTILITY EASEMENT
  - EXISTING MAJOR CONTOURS
  - EXISTING MINOR CONTOURS
  - EXISTING PIPELINE
  - EXISTING OVERHEAD LINE
  - EXISTING TREE
  - EXISTING FENCE
  - STATE OPEN WATER FLAG
  - PHOTO LOCATION (SEE REPORT)



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**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24G503676100

*Thomas D. Strong* 08/01/2019  
SIGNATURE DATE

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**MICHAEL J. DENICHILO**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 24GE05078700

*Michael J. Denichilo* 08/01/2019  
SIGNATURE DATE

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  - CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MOTT MACDONALD.

REFERENCE DRAWINGS		NO.	
DWG. NO.	TITLE		
000-03-03-077	* ACCESS ROAD DETAIL	0	ISSUED FOR NJDEP PERMIT

REVISIONS				
NO.	REVISIONS	DATE	DRAWN	CK
0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL	
DATE	
7/2019	

PREPARED FOR  
**PennEast**  
PIPELINE

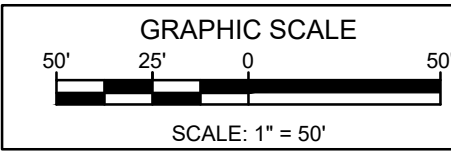
PREPARED BY  
**MOTT MACDONALD**  
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08850  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 104.2R2 - MP 104.5R3		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-123	0









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[illegible][illegible]

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL
DATE
7/2019

PREPARED FOR



PREPARED BY	
-------------	--

**MOTT  
MACDONALD**  
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT		
<p align="center"><b>PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 104.7R2 - MP 105.0R2</b></p>		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-125	0

### LEGEND

- |  |  |
|--|--|
|  | PROPOSED PIPELINE  |
|  | LIMITS OF DISTURBANCE  |
|  | PROPOSED PERMANENT EASEMENT                                  |
|  | OPERATIONAL CORRIDOR   |
|  | PROPOSED TREE LINE   |
|  | EXISTING TREE LINE   |
|  | WETLAND (SURVEYED)   |
|  | WETLAND (PUBLIC)   |
|  | WATERBODY (SURVEYED)   |
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|  | ACTIVELY DISTURBED AREA<br>(RIPARIAN IMPACT)                 |
|  | TEMPORARY ACCESS TO PROJECT<br>DISTURBANCE (RIPARIAN IMPACT) |
|  | NEW UTILITY LINE DISTURBANCE<br>(RIPARIAN IMPACT)            |
|  | RIPARIAN BUFFER  |
|  | 25' BUFFER FROM STREAM TOP OF BANK                           |
|  | STREAM CENTERLINE (SURVEYED)                                 |
|  | STREAM CENTERLINE (PUBLIC)                                   |
|  | LIMITS OF WETLAND DELINEATION                                |
|  | PROPERTY LINE  |
|  | PARCEL ID WITH<br>BLOCK AND LOT<br>NUMBER                    |
|  | EXISTING CULVERT   |
|  | CORRUGATED PLASTIC PIPE                                      |
|  | CORRUGATED METAL PIPE  |
|  | HIGH DENSITY POLYETHYLENE PIPE                               |
|  | POLYVINYL CHLORIDE PIPE                                      |
|  | REINFORCED CONCRETE PIPE                                     |
|  | UNKNOWN  |
|  | EXISTING FOREIGN UTILITY EASEMENT                            |
|  | EXISTING MAJOR CONTOURS                                      |
|  | EXISTING MINOR CONTOURS                                      |
|  | EXISTING PIPELINE  |
|  | EXISTING OVERHEAD LINE                                       |
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|  | PHOTO LOCATION (SEE REPORT)                                  |

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THOMAS D. STRONG  
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N.J. LIC. NO. 24GS03676100

Lo 37

08/01/2019

SIGNATURE

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N.J. LIC. NO. 24GE05078700

N.º: ELO: N.º: ELO: 000000000000

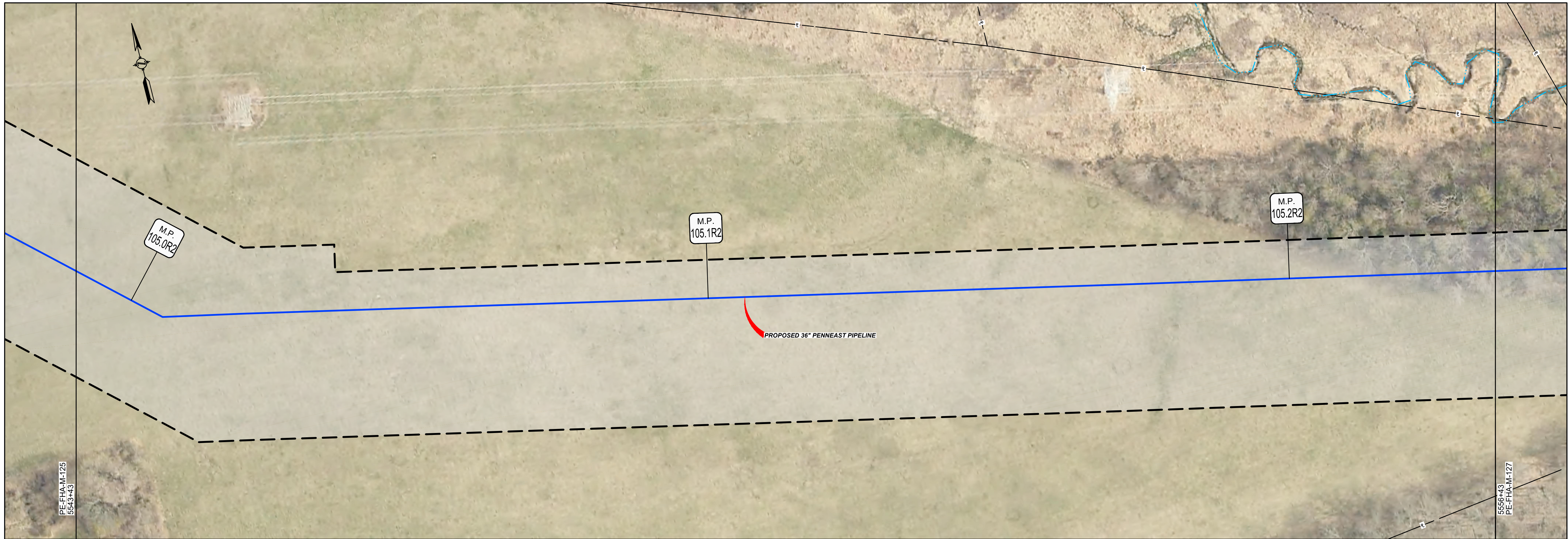
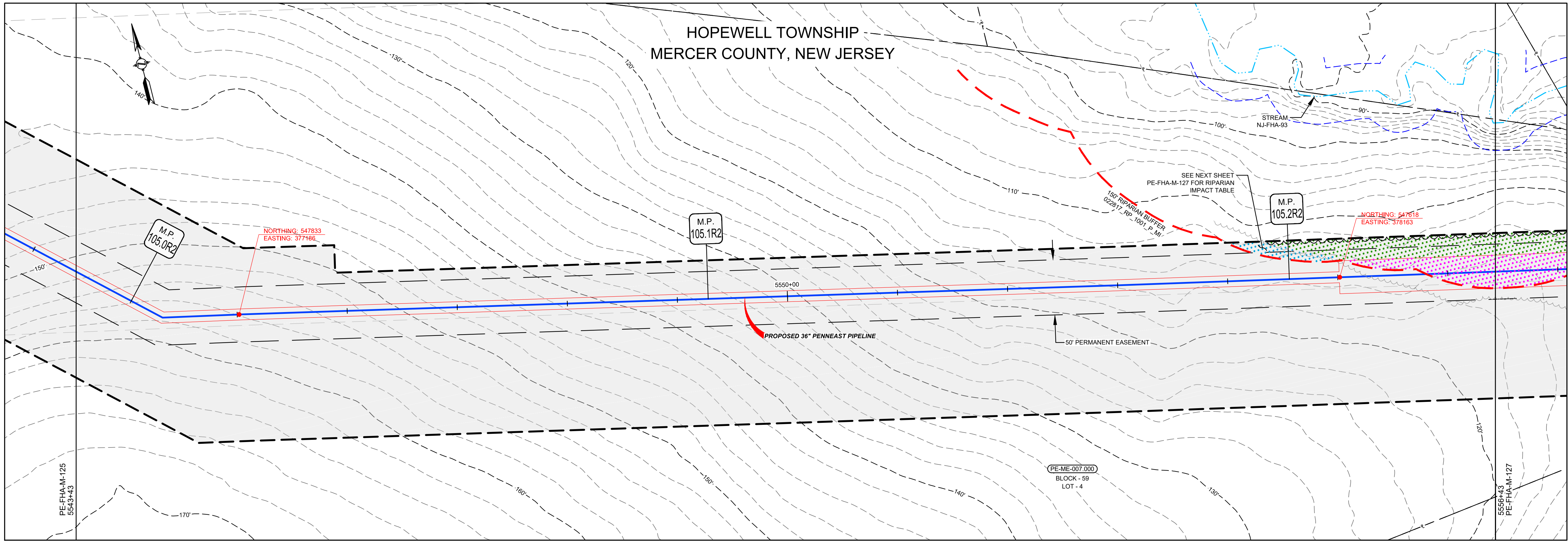
Marlene I. Hoff

08/01/2019

SIGNATURE

DATE \_\_\_\_\_





LEGEND	
	PROPOSED PIPELINE
	LIMITS OF DISTURBANCE
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	LIMITS OF WETLAND DELINEATION
	PROPERTY LINE
	PARCEL ID WITH BLOCK AND LOT NUMBER (LB-HU-A001.000 BLOCK - 1 LOT - 10.00)
	EXISTING CULVERT
	CPP CORRUGATED PLASTIC PIPE
	CMP CORRUGATED METAL PIPE
	HDPE HIGH DENSITY POLYETHYLENE PIPE
	PVC POLYVINYL CHLORIDE PIPE
	RCP REINFORCED CONCRETE PIPE
	UNK UNKNOWN
	EXISTING FOREIGN UTILITY EASEMENT
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	EXISTING PIPELINE
	EXISTING OVERHEAD LINE
	EXISTING TREE
	EXISTING FENCE
	STATE OPEN WATER FLAG
	PHOTO LOCATION (SEE REPORT)

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR  
UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I  
HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN  
WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT  
SUPERVISION.

**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

SIGNATURE

08/01/2019  
DATE

I AM A DULY REGISTERED PROFESSIONAL ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I  
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DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND  
WITH THE DETAILED ENGINEERING DRAWINGS.

**MICHAEL J. DENICHILO**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 24GE05078700

SIGNATURE

08/01/2019  
DATE

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REFERENCE DRAWINGS		REVISIONS						
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

REVISIONS						
NO	REVISIONS	DATE	DRAWN	CK	APPR	
0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

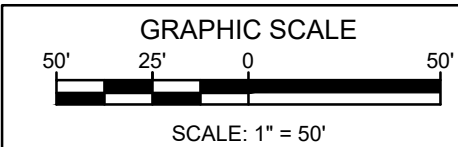
APPROVALS		
DRAWN BY	DATE	
RJP	7/2019	
CHECKED BY	DATE	
KEK	7/2019	
ENG. APPROVAL	DATE	
MJD	7/2019	
P.M. APPROVAL	DATE	
MW	7/2019	7/2019

PREPARED FOR

PREPARED BY  
**M M**  
MOTT  
MACDONALD  
111 WOOD AVENUE SOUTH, ISELIN, NJ 08830  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 105.0R2 - MP 105.2R2		
SCALE 1" = 50'	DRAWING NO. PE-FHA-M-126	REVISION 0






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  6. CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MOTT MACDONALD.

[illegible]

CLIENT APPROVAL
DATE
7/2019

PREPARED FOR

PennEast  
PIPELINE

PREPARED BY

**M M**  
**MOTT**  
**MACDONALD**

111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT  
PENNEAST PIPELINE  
FLOOD HAZARD AREA PERMIT PLAN  
MP 105.2R2 - MP 105.5R2

SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-127	0

- I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR  
UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I  
HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN  
WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT  
SUPERVISION.
- THOMAS D. STRONG**
- PROFESSIONAL LAND SURVEYOR**
- N.J. LIC. NO. 24GS03676100

 08/01/2019

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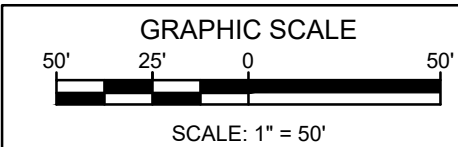
SIGNATURE DATE

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- MICHAEL J. DENICHILO**  
**PROFESSIONAL ENGINEER**
- N.J. LIC. NO. 24GE05078700

Michael Schulte 08/01/2019

SIGNATURE DATE






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[illegible][illegible]

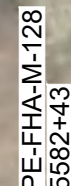
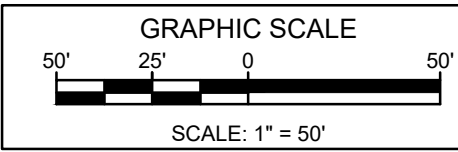
APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

[illegible]

	<p>PREPARED FOR</p> 
	<p>PREPARED BY <b>M M</b></p> <p><b>MOTT MACDONALD</b></p> <p>111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830</p> <p>CERTIFICATE NO. 24GA28016600</p>

PENNEAST PIPELINE PROJECT		
<p align="center"><b>PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 105.5R2 - MP 105.7R2</b></p>		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-128	0





- [illegible]

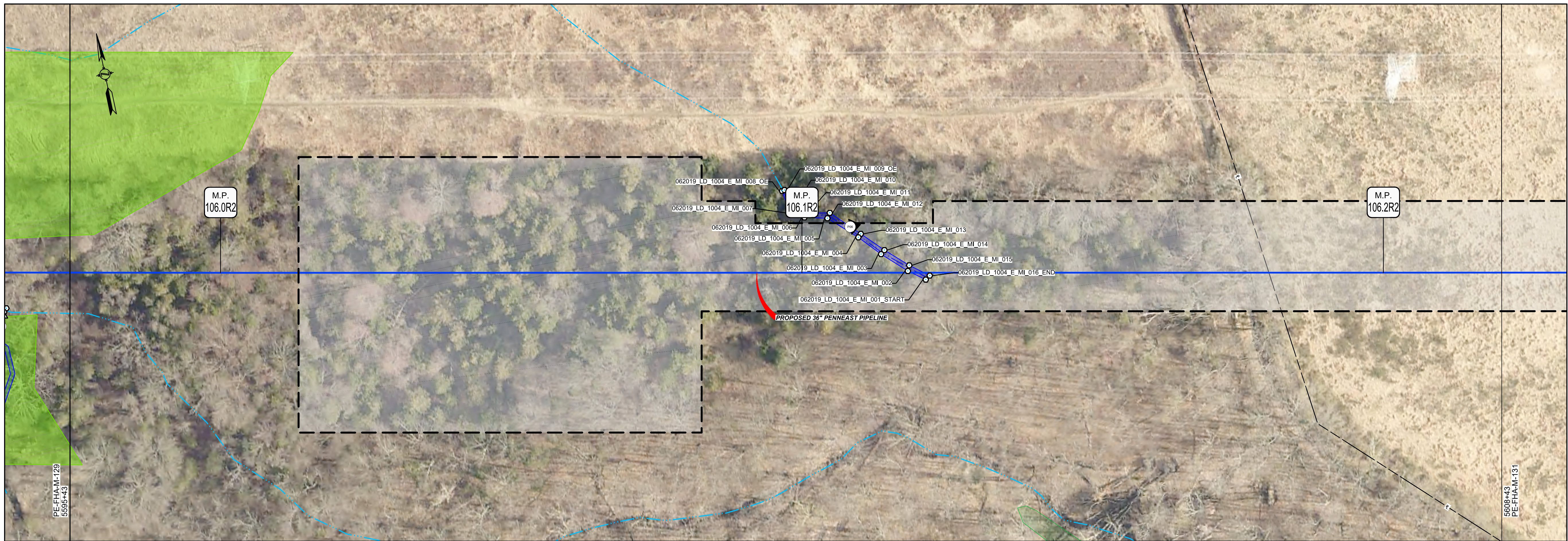
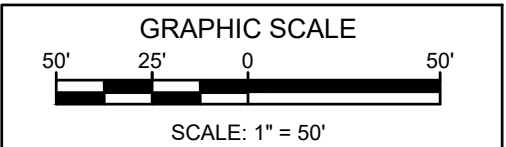
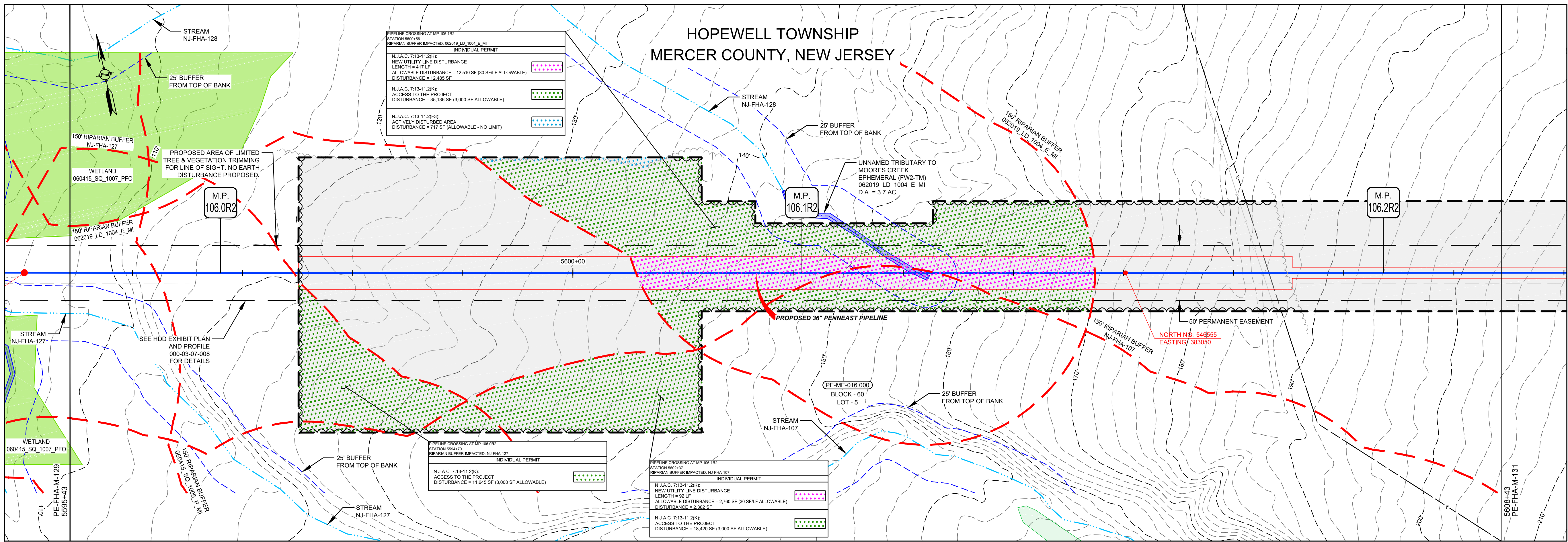
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APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL
DATE
7/2019

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 105.7R2 - MP 106.0R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-129	0





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REFERENCE DRAWINGS		NO.	
DWG. NO.	TITLE		
000-03-07-008	* HDD EXHIBIT PLAN AND PROFILE	0	ISSUED FOR NJDEP PERMIT
PE-SSC-M-106.12R2	SUPPLEMENTAL STREAM CROSSING DETAIL		

REVISIONS				APPROVALS			
NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	RJP	7/2019
						CHECKED BY	DATE
						KEK	7/2019
						ENG. APPROVAL	DATE
						MJD	7/2019
						P.M. APPROVAL	DATE
						MW	7/2019

APPROVALS		CLIENT APPROVAL	
DRAWN BY	DATE		
RJP	7/2019		
CHECKED BY	DATE		
KEK	7/2019		
ENG. APPROVAL	DATE		
MJD	7/2019		
P.M. APPROVAL	DATE		
MW	7/2019		

PREPARED FOR		PREPARED BY	
		111 WOOD AVENUE SOUTH, ISELIN, NJ 08830	
		CERTIFICATE NO. 24GA28016600	

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 106.0R2 - MP 106.2R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-130	0

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

SIGNATURE

08/01/2019  
DATE

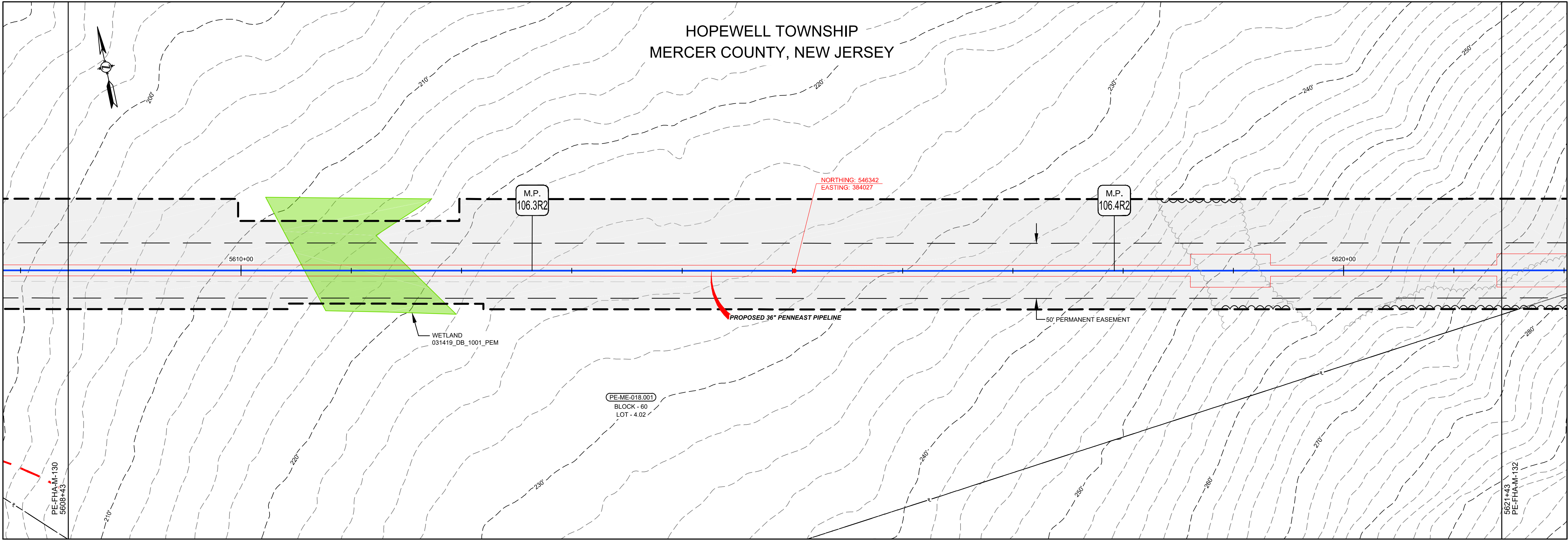
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**MICHAEL J. DENICHILO**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 24GE05078700

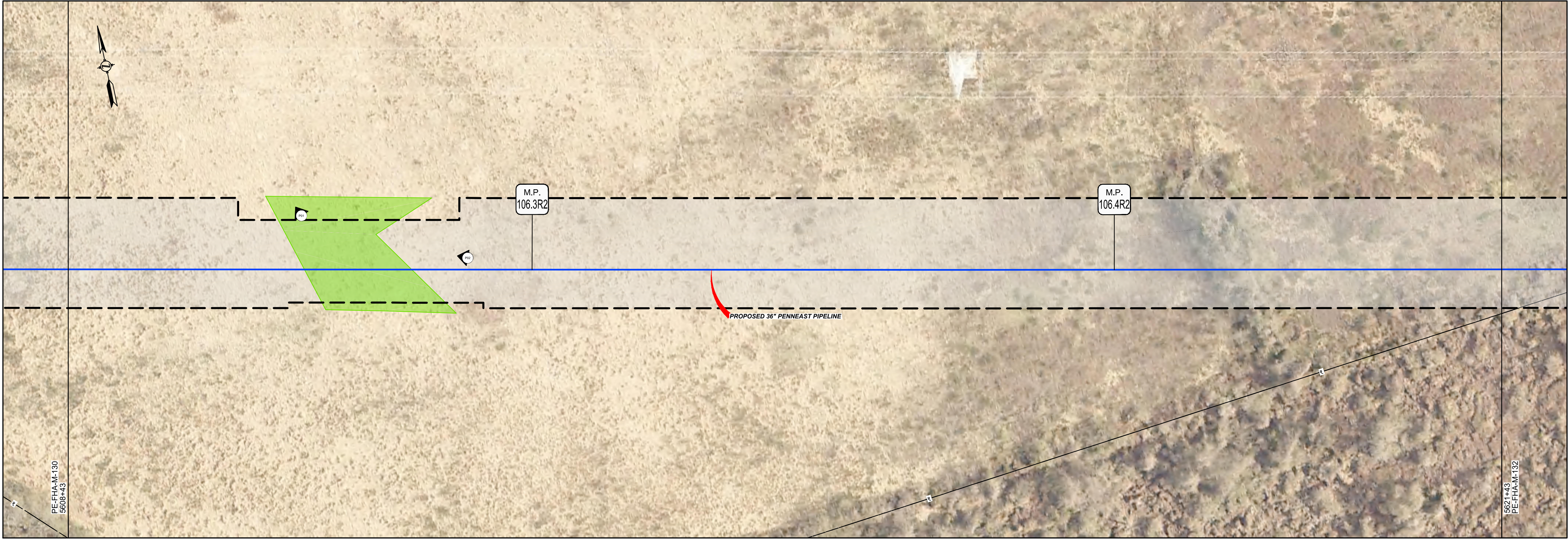
SIGNATURE

08/01/2019  
DATE





- LEGEND**
- PROPOSED PIPELINE
  - LIMITS OF DISTURBANCE
  - PROPOSED PERMANENT EASEMENT
  - OPERATIONAL CORRIDOR
  - PROPOSED TREE LINE
  - EXISTING TREE LINE
  - WETLAND (SURVEYED)
  - WETLAND (PUBLIC)
  - WATERBODY (SURVEYED)
  - WATERBODY (PUBLIC)
  - ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)
  - TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)
  - NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)
  - RIPARIAN BUFFER
  - 25' BUFFER FROM STREAM TOP OF BANK
  - STREAM CENTERLINE (SURVEYED)
  - STREAM CENTERLINE (PUBLIC)
  - LIMITS OF WETLAND DELINEATION
  - PROPERTY LINE
  - PARCEL ID WITH BLOCK AND LOT NUMBER
  - EXISTING CULVERT
  - CPP CORRUGATED PLASTIC PIPE
  - CMP CORRUGATED METAL PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - PVC POLYVINYL CHLORIDE PIPE
  - RCP REINFORCED CONCRETE PIPE
  - UNK UNKNOWN
  - EXISTING FOREIGN UTILITY EASEMENT
  - 1260' EXISTING MAJOR CONTOURS
  - EXISTING MINOR CONTOURS
  - EXISTING PIPELINE
  - OH EXISTING OVERHEAD LINE
  - EXISTING TREE
  - EXISTING FENCE
  - STATE OPEN WATER FLAG
  - PHOTO LOCATION (SEE REPORT)



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N.J. LIC. NO. 24GS03676100

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REFERENCE DRAWINGS		REVISIONS			
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP

APPROVALS				CLIENT APPROVAL	
DRAWN BY	DATE	CHECKED BY	DATE	DATE	DATE
RJP	7/2019				
KEK	7/2019				
ENG. APPROVAL	DATE				
MJD	7/2019				
P.M. APPROVAL	DATE				
MW	7/2019				

PREPARED FOR  
**PennEast**  
PIPELINE

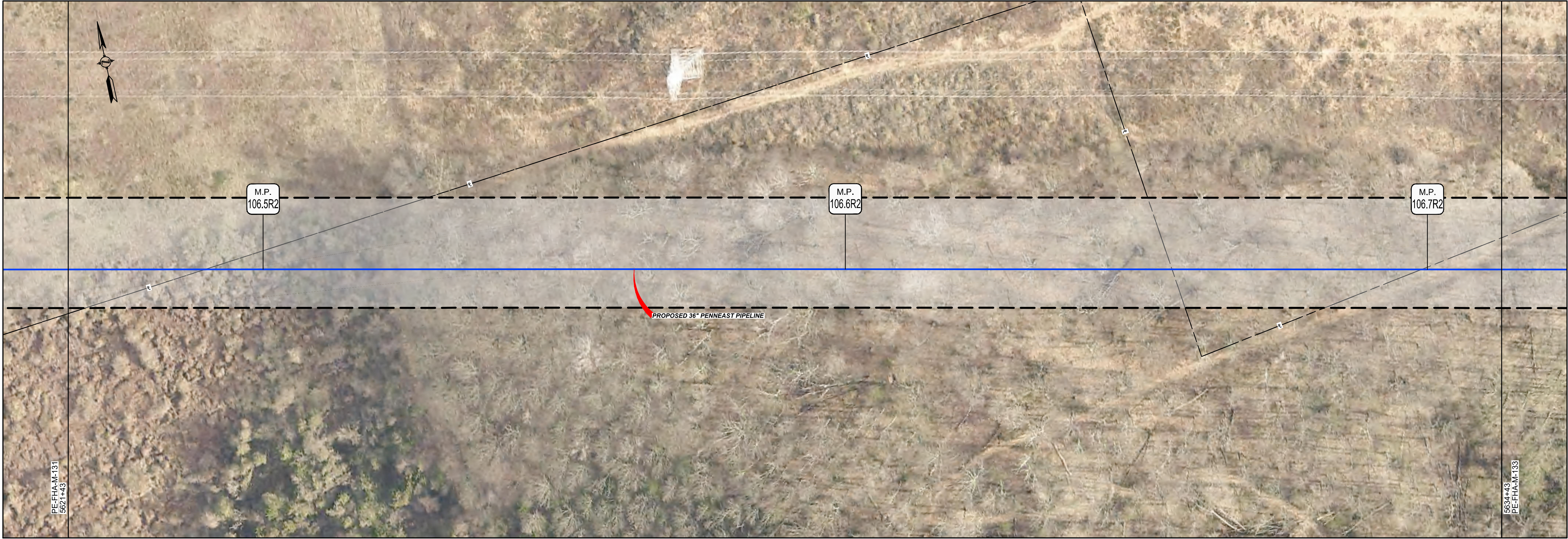
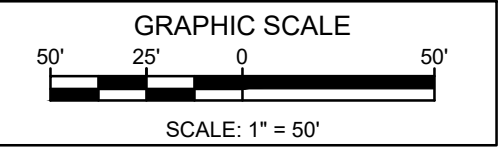
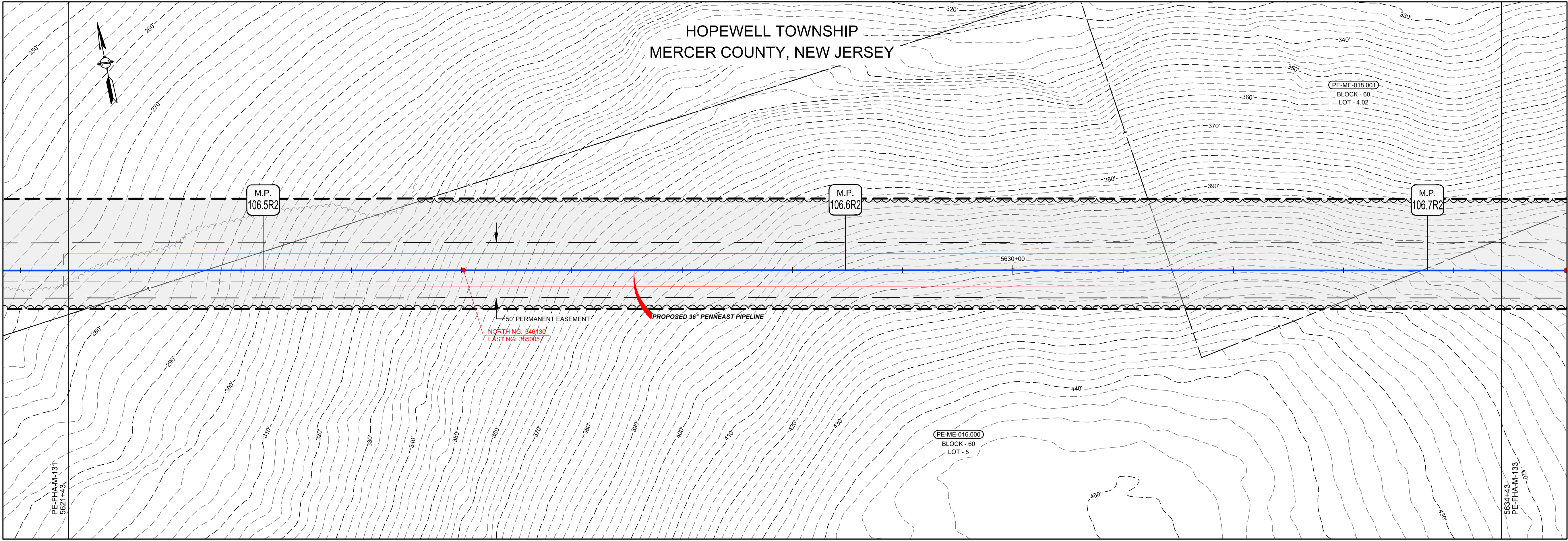
PREPARED BY  
**MOTT MACDONALD**  
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830  
CERTIFICATE NO. 24GA28016600

**PENNEAST PIPELINE PROJECT**

**PENNEAST PIPELINE  
FLOOD HAZARD AREA PERMIT PLAN  
MP106.2R2 - MP 106.5R2**

SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-131	0





- LEGEND**
- PROPOSED PIPELINE
  - LIMITS OF DISTURBANCE
  - PROPOSED PERMANENT EASEMENT
  - OPERATIONAL CORRIDOR
  - PROPOSED TREE LINE
  - EXISTING TREE LINE
  - WETLAND (SURVEYED)
  - WETLAND (PUBLIC)
  - WATERBODY (SURVEYED)
  - WATERBODY (PUBLIC)
  - ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)
  - TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)
  - NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)
  - RIPARIAN BUFFER
  - 25' BUFFER FROM STREAM TOP OF BANK
  - STREAM CENTERLINE (SURVEYED)
  - STREAM CENTERLINE (PUBLIC)
  - LIMITS OF WETLAND DELINEATION
  - PROPERTY LINE
  - PARCEL ID WITH BLOCK AND LOT NUMBER
  - EXISTING CULVERT
  - CPP CORRUGATED PLASTIC PIPE
  - CMP CORRUGATED METAL PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - PVC POLYVINYL CHLORIDE PIPE
  - RCP REINFORCED CONCRETE PIPE
  - UNK UNKNOWN
  - EXISTING FOREIGN UTILITY EASEMENT
  - 1260' EXISTING MAJOR CONTOURS
  - EXISTING MINOR CONTOURS
  - EXISTING PIPELINE
  - OH EXISTING OVERHEAD LINE
  - EXISTING TREE
  - EXISTING FENCE
  - STATE OPEN WATER FLAG
  - PHOTO LOCATION (SEE REPORT)

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**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

*Thomas D. Strong* 08/01/2019  
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REFERENCE DRAWINGS		REVISIONS						
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

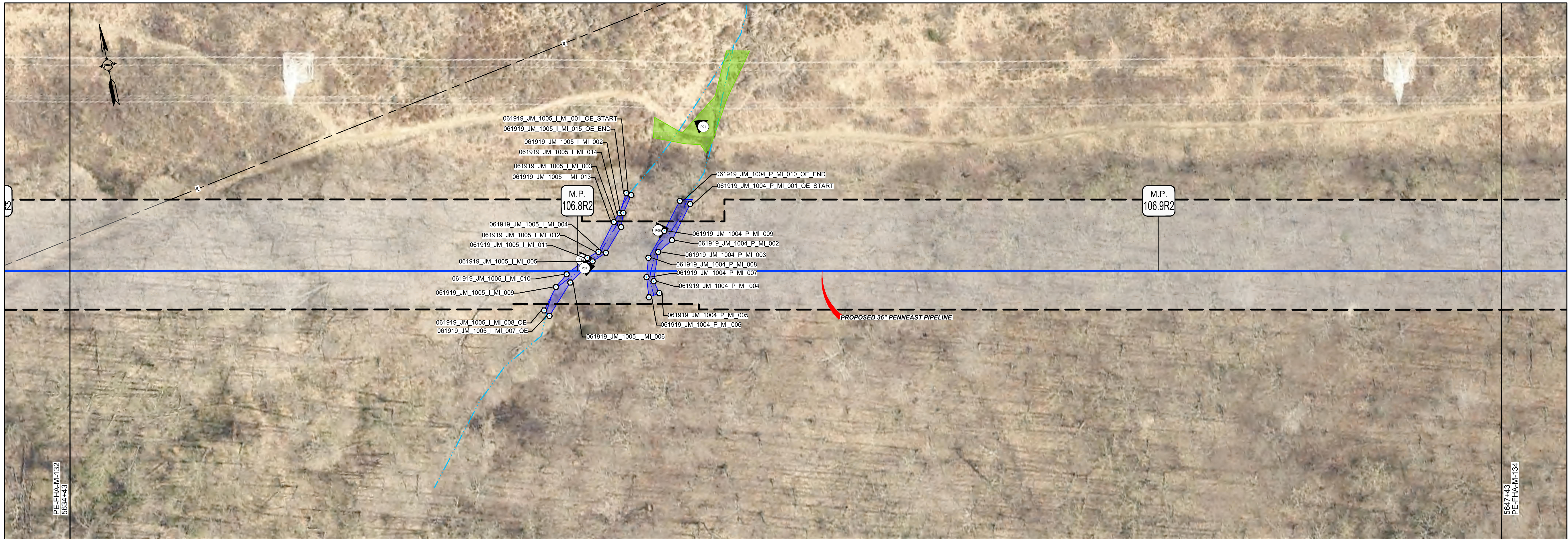
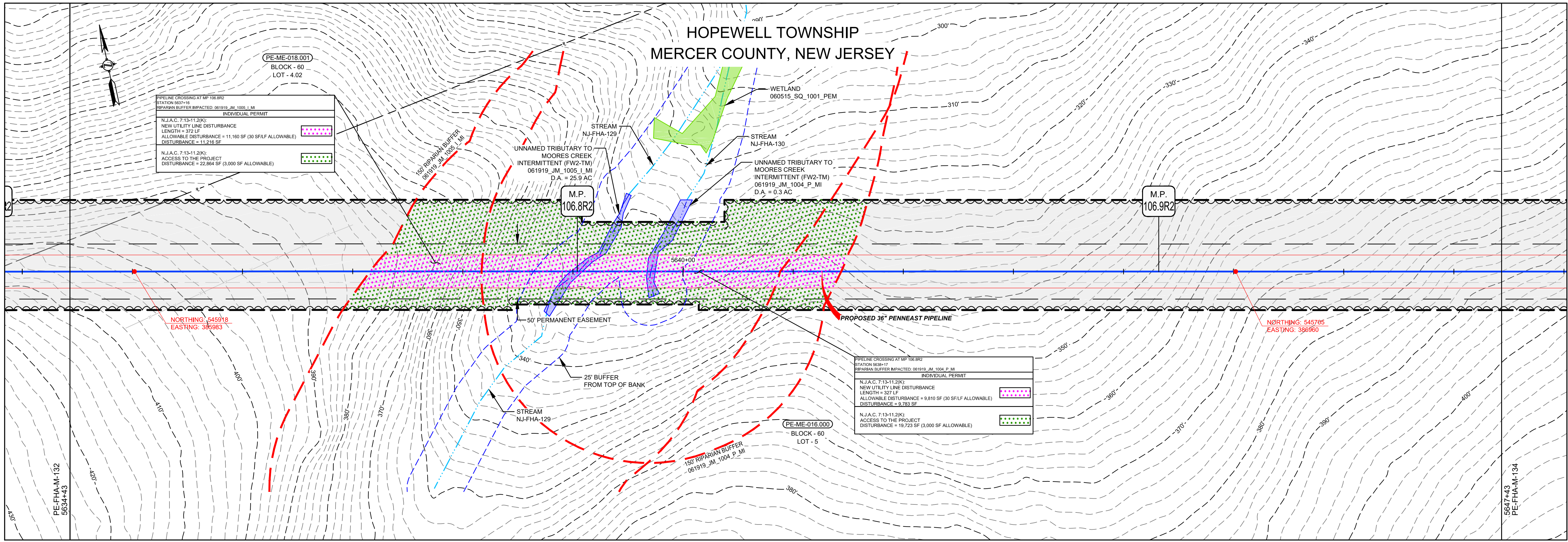
REVISIONS						
NO	REVISIONS	DATE	DRAWN	CK	APPR	
0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	


PREPARED FOR  
**PennEast**  
PIPELINE

PREPARED BY  
**M M**  
MOTT  
MACDONALD  
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 106.5R2 - MP 106.7R2		
SCALE 1" = 50'	DRAWING NO. PE-FHA-M-132	REVISION 0





**LEGEND**

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- WATERBODY (SURVEYED)
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- PARCEL ID WITH BLOCK AND LOT NUMBER
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- 1260' EXISTING MAJOR CONTOURS
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N.J. LIC. NO. 24GE05078700

*Michael J. Denichilo* 08/01/2019  
SIGNATURE DATE

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REFERENCE DRAWINGS		REVISIONS							APPROVALS	
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR		DRAWN BY	DATE
PE-SSC-M-106.80R2	SUPPLEMENTAL STREAM CROSSING DETAIL	0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD		RJP	7/2019
PE-SSC-M-106.81R2	SUPPLEMENTAL STREAM CROSSING DETAIL								CHECKED BY	DATE
									KEK	7/2019
									ENG. APPROVAL	DATE
									MJD	7/2019
									P.M. APPROVAL	DATE
									MW	7/2019

CLIENT APPROVAL	DATE
	7/2019

PREPARED FOR  
**PennEast**  
PIPELINE

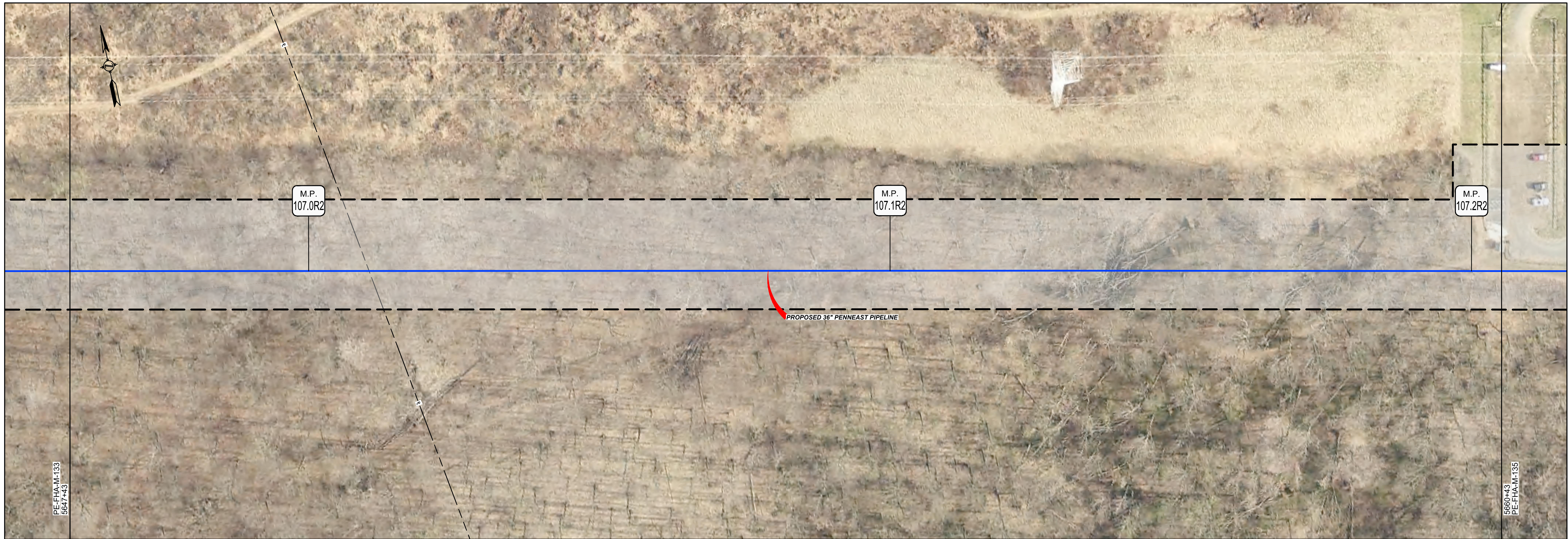
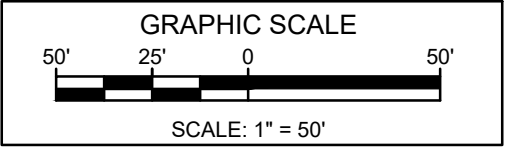
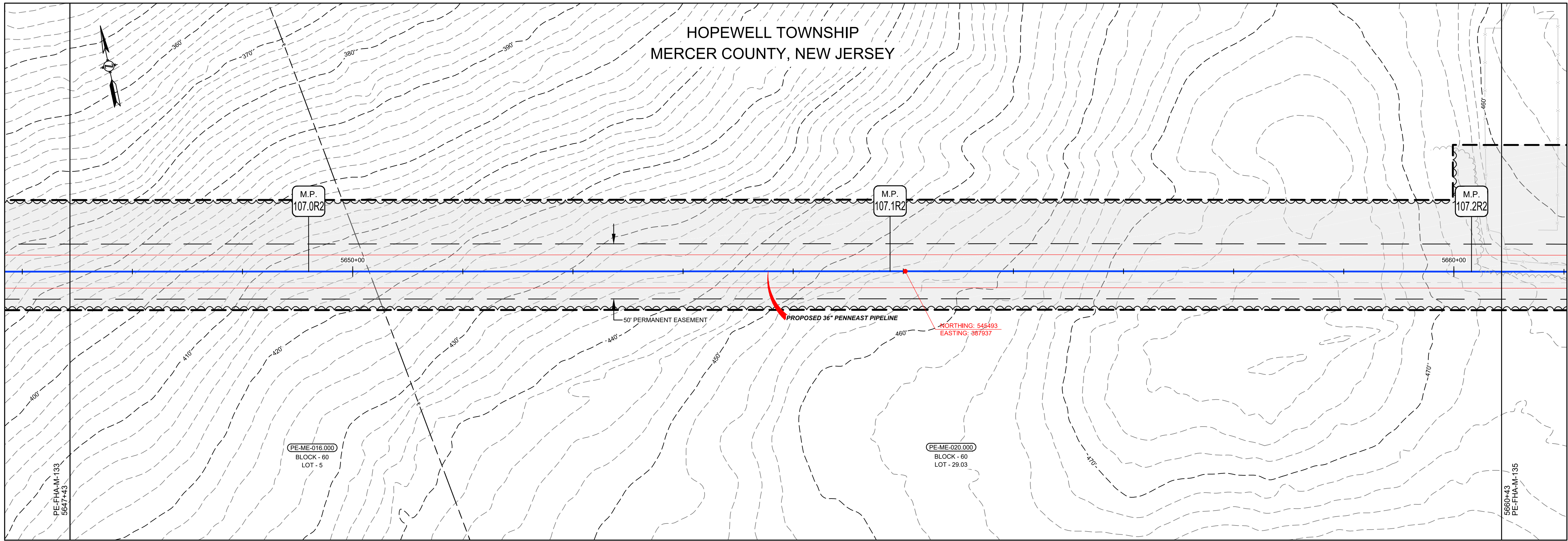
PREPARED BY  
**MOTT MACDONALD**  
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08850  
CERTIFICATE NO. 24GA28016600

**PENNEAST PIPELINE PROJECT**

**PENNEAST PIPELINE**  
FLOOD HAZARD AREA PERMIT PLAN  
MP 106.7R2 - MP 107.0R2

SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-133	0





- LEGEND**
- PROPOSED PIPELINE
  - LIMITS OF DISTURBANCE
  - PROPOSED PERMANENT EASEMENT
  - OPERATIONAL CORRIDOR
  - PROPOSED TREE LINE
  - EXISTING TREE LINE
  - WETLAND (SURVEYED)
  - WETLAND (PUBLIC)
  - WATERBODY (SURVEYED)
  - WATERBODY (PUBLIC)
  - ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)
  - TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)
  - NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)
  - RIPARIAN BUFFER
  - 25' BUFFER FROM STREAM TOP OF BANK
  - STREAM CENTERLINE (SURVEYED)
  - STREAM CENTERLINE (PUBLIC)
  - LIMITS OF WETLAND DELINEATION
  - PROPERTY LINE
  - PARCEL ID WITH BLOCK AND LOT NUMBER
  - EXISTING CULVERT
  - CPP CORRUGATED PLASTIC PIPE
  - CMP CORRUGATED METAL PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - PVC POLYVINYL CHLORIDE PIPE
  - RCP REINFORCED CONCRETE PIPE
  - UNK UNKNOWN
  - EXISTING FOREIGN UTILITY EASEMENT
  - 1260' EXISTING MAJOR CONTOURS
  - EXISTING MINOR CONTOURS
  - EXISTING PIPELINE
  - OH EXISTING OVERHEAD LINE
  - EXISTING TREE
  - EXISTING FENCE
  - SOW\_FLAG\_NO STATE OPEN WATER FLAG
  - PHOTO LOCATION (SEE REPORT)

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

*Thomas D. Strong* 08/01/2019  
SIGNATURE DATE

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

**MICHAEL J. DENICHILO**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 24GE05078700

*Michael J. Denichilo* 08/01/2019  
SIGNATURE DATE

- NOTES:
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  - THESE PLANS ARE FOR PERMITTING PURPOSES ONLY. THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION.
  - WETLAND AND WATERBODY DELINEATION SURVEYS COMPLETED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.
  - PHOTO LOCATIONS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.
  - RIPARIAN ZONES AND WETLAND TRANSITION AREAS PROVIDED BY PAULUS, SOKOLOWSKI AND SARTOR (PS&S).
  - CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MOTT MACDONALD.

REFERENCE DRAWINGS		REVISIONS						
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

APPROVALS						
DRAWN BY	DATE					
RJP	7/2019					
CHECKED BY	DATE					
KEK	7/2019					
ENG. APPROVAL	DATE					
MJD	7/2019					
P.M. APPROVAL	DATE					
MW	7/2019					

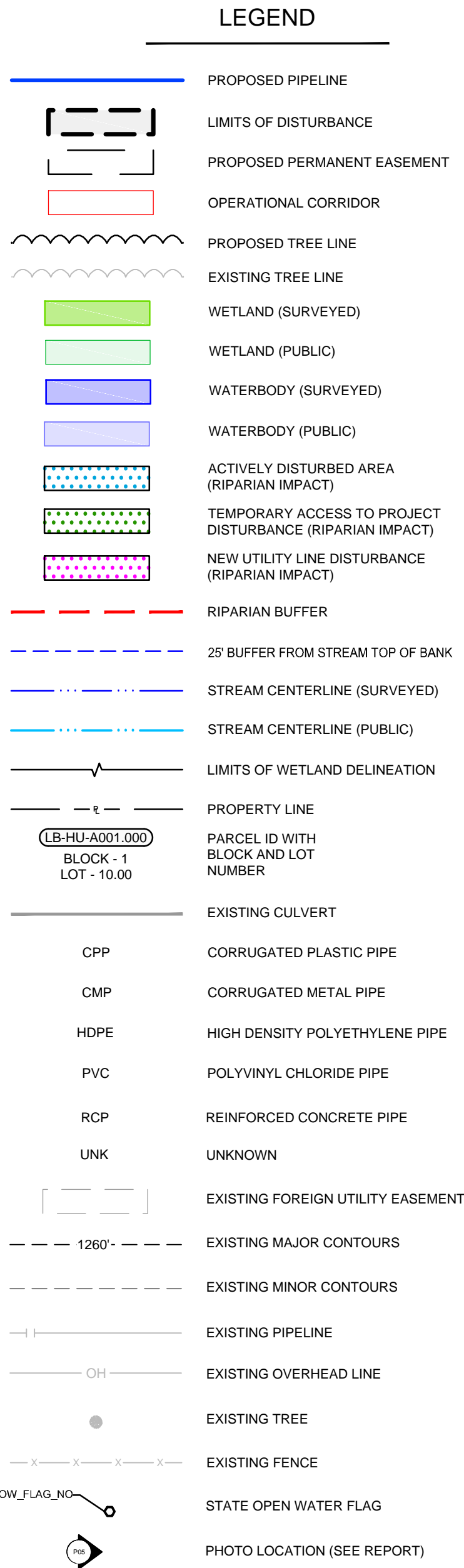
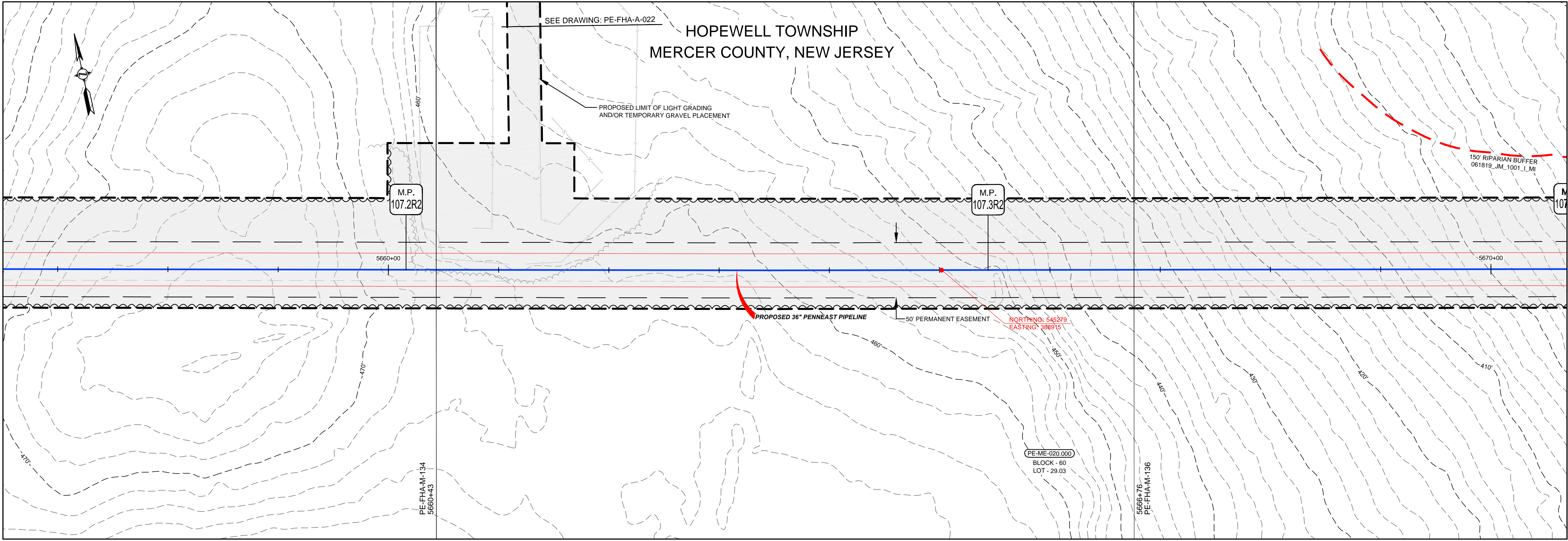
APPROVALS		CLIENT APPROVAL	
DRAWN BY	DATE		
RJP	7/2019		
CHECKED BY	DATE		
KEK	7/2019		
ENG. APPROVAL	DATE		
MJD	7/2019		
P.M. APPROVAL	DATE		
MW	7/2019		

PREPARED FOR  
**PennEast**  
PIPELINE

PREPARED BY  
**M M**  
MOTT  
MACDONALD  
111 WOOD AVENUE SOUTH, ISELIN, NJ 08830  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 107.0R2 - MP 107.2R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-134	0





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PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

*Thomas D. Strong*  
SIGNATURE

08/01/2019  
DATE

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*Michael J. Denichilo*  
SIGNATURE

08/01/2019  
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REFERENCE DRAWINGS		NO.		REVISIONS			
DWG. NO.	TITLE			REVISIONS	DATE	DRAWN	CK
000-03-03-078	* ACCESS ROAD DETAIL	0		ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK

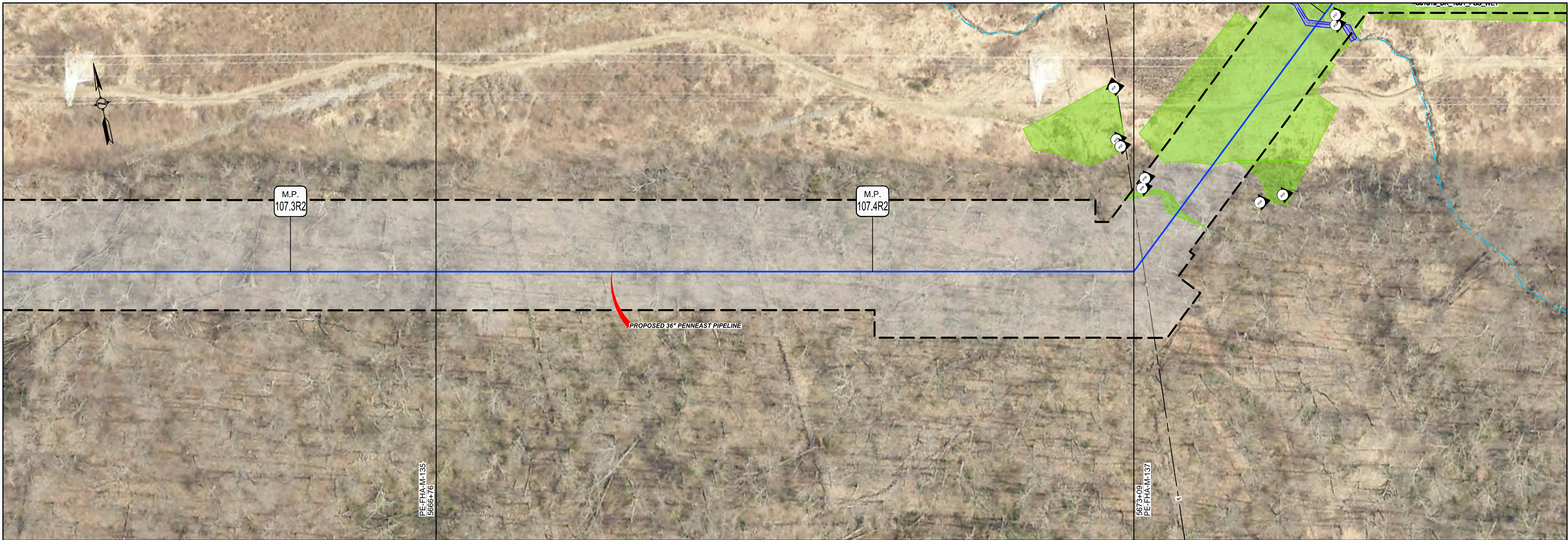
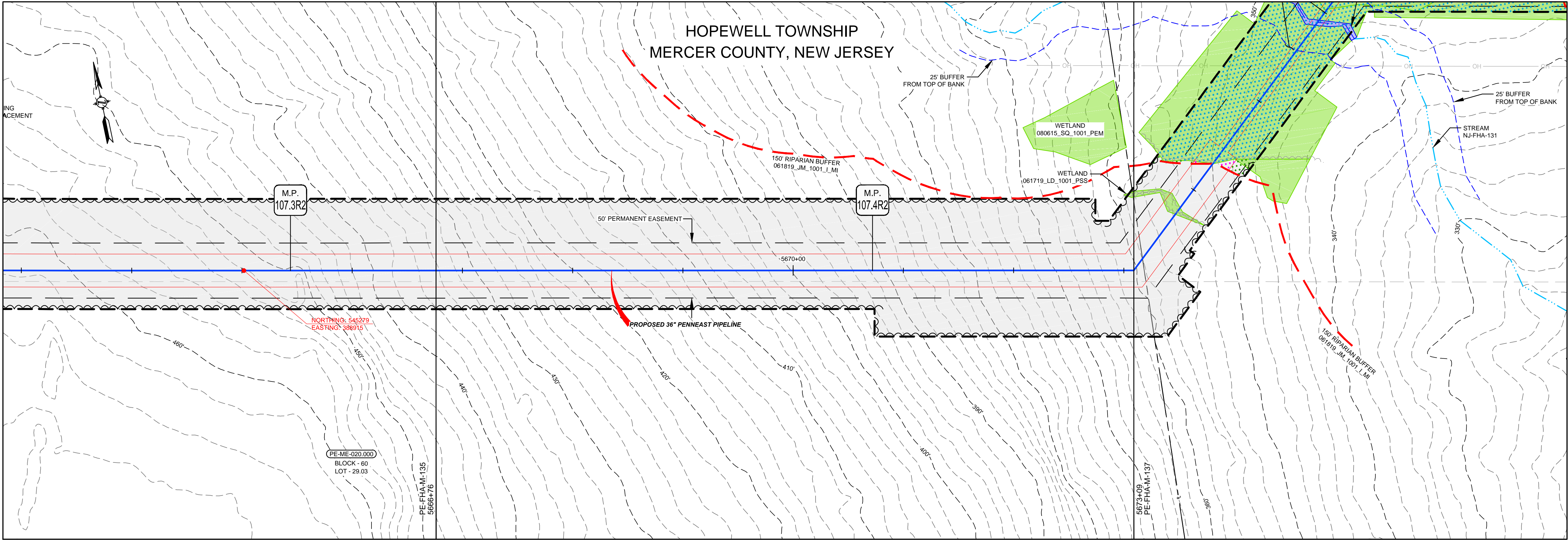
APPROVALS				APPROVALS			
DRAWN BY	DATE	CLIENT APPROVAL	DATE	DRAWN BY	DATE	CLIENT APPROVAL	DATE
RJP	7/2019			RJP	7/2019		
CHECKED BY	DATE			KEK	7/2019		
ENG. APPROVAL	DATE			MJD	7/2019		
P.M. APPROVAL	DATE			MW	7/2019		

PREPARED FOR  
**PennEast**  
PIPELINE

PREPARED BY  
**MOTT MACDONALD**  
111 WOOD AVENUE SOUTH, ISELIN, NJ 08830  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 107.2R2 - MP 107.3R2		
SCALE 1" = 50'	DRAWING NO. PE-FHA-M-135	REVISION 0





**LEGEND**

PROPOSED PIPELINE

LIMITS OF DISTURBANCE

PROPOSED PERMANENT EASEMENT

OPERATIONAL CORRIDOR

PROPOSED TREE LINE

EXISTING TREE LINE

WETLAND (SURVEYED)

WETLAND (PUBLIC)

WATERBODY (SURVEYED)

WATERBODY (PUBLIC)

ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)

TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)

NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)

RIPARIAN BUFFER

25' BUFFER FROM STREAM TOP OF BANK

STREAM CENTERLINE (SURVEYED)

STREAM CENTERLINE (PUBLIC)

LIMITS OF WETLAND DELINEATION

PROPERTY LINE

PARCEL ID WITH BLOCK AND LOT NUMBER  
(LB-HU-A001.000)  
BLOCK - 1  
LOT - 10.00

EXISTING CULVERT

CPP  
CORRUGATED PLASTIC PIPE

CMP  
CORRUGATED METAL PIPE

HDPE  
HIGH DENSITY POLYETHYLENE PIPE

PVC  
POLYVINYL CHLORIDE PIPE

RCP  
REINFORCED CONCRETE PIPE

UNK  
UNKNOWN

EXISTING FOREIGN UTILITY EASEMENT

1260' ---  
EXISTING MAJOR CONTOURS

---  
EXISTING MINOR CONTOURS

---  
EXISTING PIPELINE

OH ---  
EXISTING OVERHEAD LINE

●  
EXISTING TREE

---  
EXISTING FENCE

SOW\_FLAG\_NO  
STATE OPEN WATER FLAG

●  
PHOTO LOCATION (SEE REPORT)

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**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

08/01/2019  
SIGNATURE DATE

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**MICHAEL J. DENICHILO**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 24GE05078700

08/01/2019  
SIGNATURE DATE

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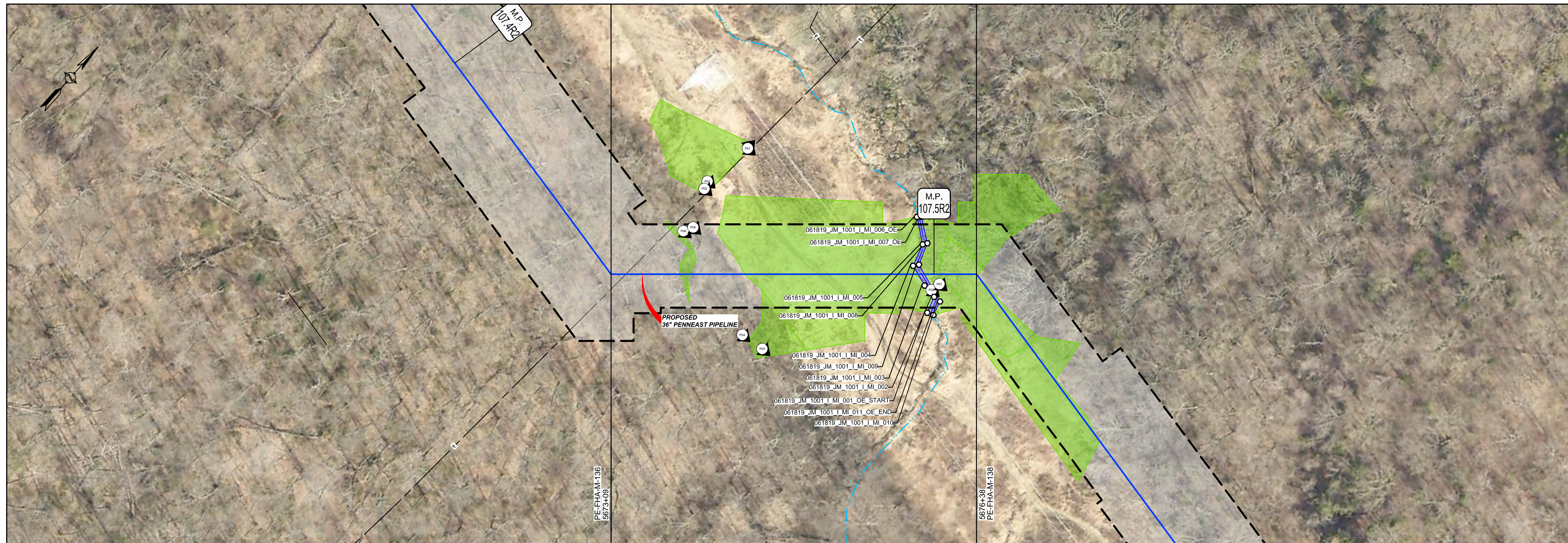
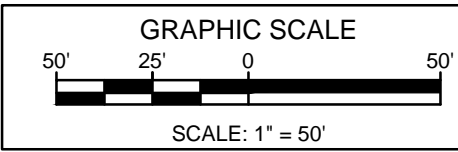
REFERENCE DRAWINGS		REVISIONS			
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP

APPROVALS				CLIENT APPROVAL	
DRAWN BY	DATE	CHECKED BY	DATE	DATE	DATE
RJP	7/2019				
KEK	7/2019				
ENG. APPROVAL	DATE				
MJD	7/2019				
P.M. APPROVAL	DATE				
MW	7/2019				

APPROVALS		
DRAWN BY	DATE	
RJP	7/2019	
CHECKED BY	DATE	
KEK	7/2019	
ENG. APPROVAL	DATE	
MJD	7/2019	CLIENT APPROVAL
P.M. APPROVAL	DATE	DATE
MW	7/2019	7/2019

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 107.3R2 - MP 107.4R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-136	0






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  6. CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MATT MC DONALD.

[illegible][illegible]

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

	CLIENT APPROVAL
	DATE
	7/2019

<p>PREPARED FOR</p> <div data-bbox="2423 1845 2499 1870">  </div>		
<p>PREPARED BY</p>	<p><b>M</b></p> <p><b>M</b></p> <p><b>MOTT</b> <b>MACDONALD</b></p>	
<p>111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830</p> <p>CERTIFICATE NO. 24GA28016600</p>		

PENNEAST PIPELINE PROJECT		
<p align="center"><b>PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 107.4R2 - MP 107.5R2</b></p>		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-137	0

## LEGEND

- |  |  |
|--|--|
|  | PROPOSED PIPELINE  |
|  | LIMITS OF DISTURBANCE  |
|  | PROPOSED PERMANENT EASEMENT                                  |
|  | OPERATIONAL CORRIDOR   |
|  | PROPOSED TREE LINE   |
|  | EXISTING TREE LINE   |
|  | WETLAND (SURVEYED)   |
|  | WETLAND (PUBLIC)   |
|  | WATERBODY (SURVEYED)   |
|  | WATERBODY (PUBLIC)   |
|  | ACTIVELY DISTURBED AREA<br>(RIPARIAN IMPACT)                 |
|  | TEMPORARY ACCESS TO PROJECT<br>DISTURBANCE (RIPARIAN IMPACT) |
|  | NEW UTILITY LINE DISTURBANCE<br>(RIPARIAN IMPACT)            |
|  | RIPARIAN BUFFER  |
|  | 25' BUFFER FROM STREAM TOP OF BANK                           |
|  | STREAM CENTERLINE (SURVEYED)                                 |
|  | STREAM CENTERLINE (PUBLIC)                                   |
|  | LIMITS OF WETLAND DELINEATION                                |
|  | PROPERTY LINE  |
|  | PARCEL ID WITH<br>BLOCK AND LOT<br>NUMBER                    |
|  | EXISTING CULVERT   |
|  | CORRUGATED PLASTIC PIPE                                      |
|  | CORRUGATED METAL PIPE  |
|  | HIGH DENSITY POLYETHYLENE PIPE                               |
|  | POLYVINYL CHLORIDE PIPE                                      |
|  | REINFORCED CONCRETE PIPE                                     |
|  | UNKNOWN  |
|  | EXISTING FOREIGN UTILITY EASEMENT                            |
|  | EXISTING MAJOR CONTOURS                                      |
|  | EXISTING MINOR CONTOURS                                      |
|  | EXISTING PIPELINE  |
|  | EXISTING OVERHEAD LINE                                       |
|  | EXISTING TREE  |
|  | EXISTING FENCE   |
|  | STATE OPEN WATER FLAG  |
|  | PHOTO LOCATION (SEE REPORT)                                  |

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR  
UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I  
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SUPERVISION.

**THOMAS D. STRONG**

**PROFESSIONAL LAND SURVEYOR**

N.J. LIC. NO. 24GS03676100

 08/01/2019

SIGNATURE DATE

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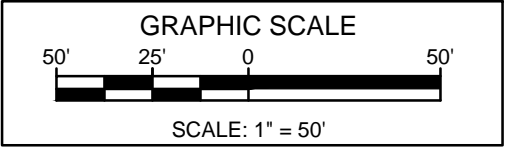
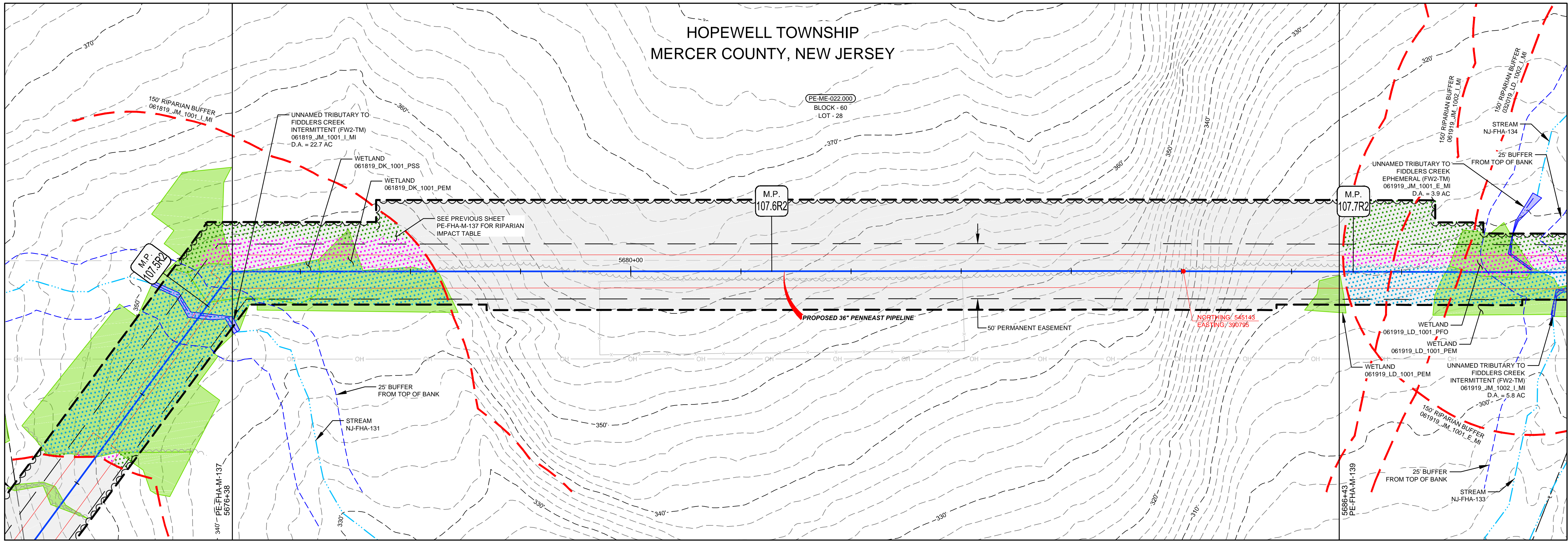
**MICHAEL J. DENICHILO**  
**PROFESSIONAL ENGINEER**

N.J. LIC. NO. 24GE05078700

 08/01/2019

SIGNATURE DATE





- LEGEND**
- PROPOSED PIPELINE
  - LIMITS OF DISTURBANCE
  - PROPOSED PERMANENT EASEMENT
  - OPERATIONAL CORRIDOR
  - PROPOSED TREE LINE
  - EXISTING TREE LINE
  - WETLAND (SURVEYED)
  - WETLAND (PUBLIC)
  - WATERBODY (SURVEYED)
  - WATERBODY (PUBLIC)
  - ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)
  - TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)
  - NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)
  - RIPARIAN BUFFER
  - 25' BUFFER FROM STREAM TOP OF BANK
  - STREAM CENTERLINE (SURVEYED)
  - STREAM CENTERLINE (PUBLIC)
  - LIMITS OF WETLAND DELINEATION
  - PROPERTY LINE
  - PARCEL ID WITH BLOCK AND LOT NUMBER
  - EXISTING CULVERT
  - CPP CORrugated PLastic PIPE
  - CMP CORrugated METAL PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - PVC POLYVINYL CHLORIDE PIPE
  - RCP REINFORCED CONCRETE PIPE
  - UNK UNKNOWN
  - EXISTING FOREIGN UTILITY EASEMENT
  - 1260' EXISTING MAJOR CONTOURS
  - EXISTING MINOR CONTOURS
  - EXISTING PIPELINE
  - EXISTING OVERHEAD LINE
  - EXISTING TREE
  - EXISTING FENCE
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  - PHOTO LOCATION (SEE REPORT)

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REFERENCE DRAWINGS		REVISIONS						
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

REVISIONS							APPROVALS	
NO.	REVISIONS	DATE	DRAWN	CK	APPR		DRAWN BY	DATE
							RJP	7/2019
							KEK	7/2019
							MJD	7/2019
							MW	7/2019

APPROVALS		CLIENT APPROVAL
DRAWN BY	DATE	
RJP	7/2019	
KEK	7/2019	
MJD	7/2019	
MW	7/2019	

PREPARED FOR  
**PennEast**  
PIPELINE

PREPARED BY  
**MOTT MACDONALD**  
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830  
CERTIFICATE NO. 24GA28016600

**PENNEAST PIPELINE PROJECT**

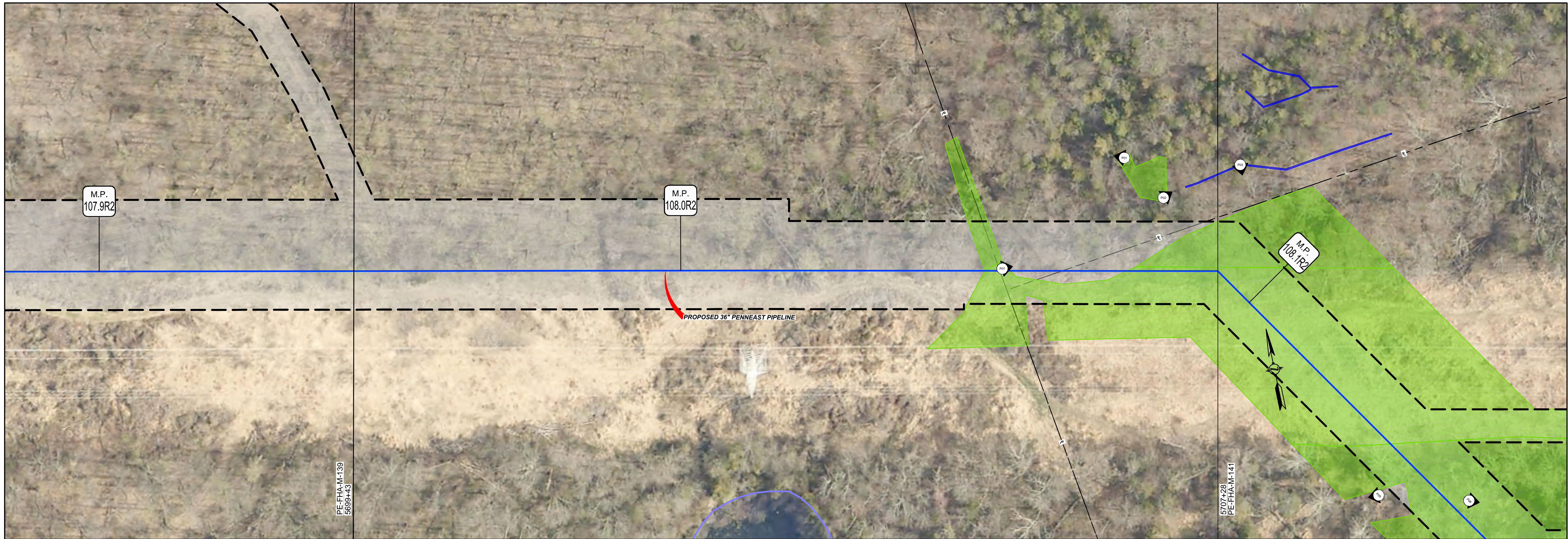
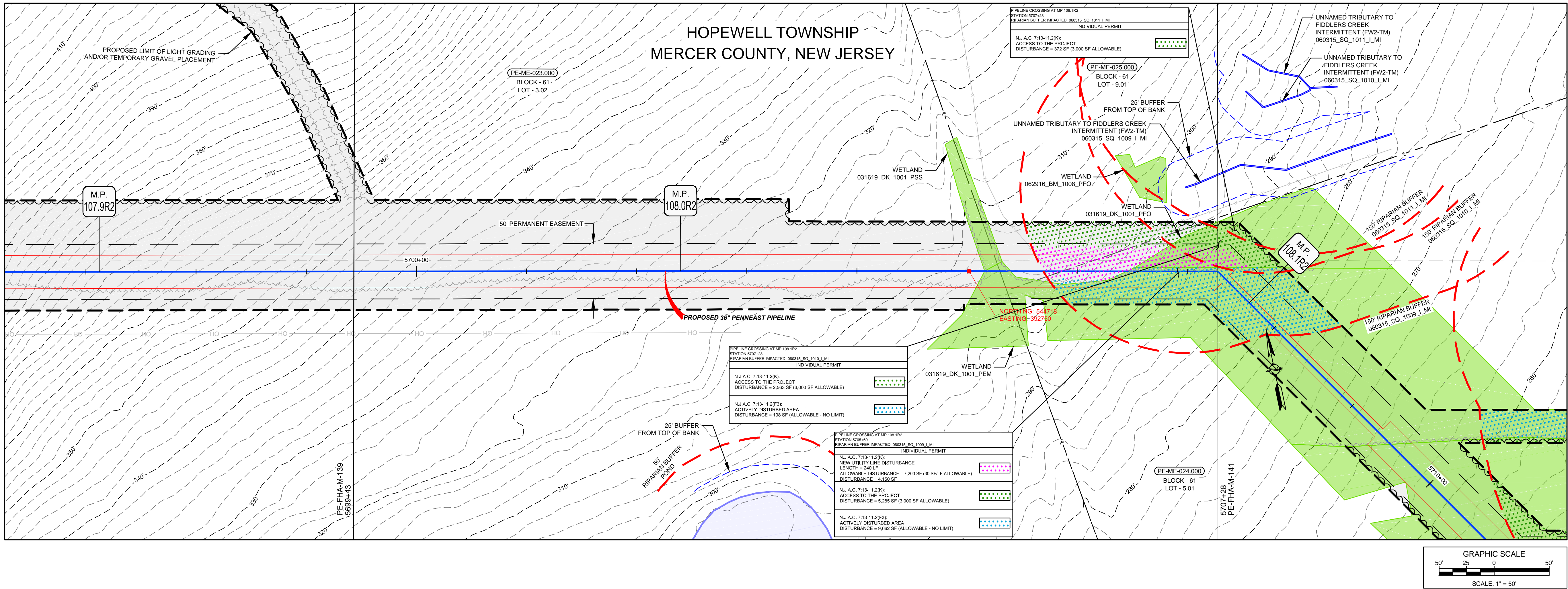
**PENNEAST PIPELINE**  
**FLOOD HAZARD AREA PERMIT PLAN**  
**MP 107.5R2 - MP 107.7R2**

SCALE	DRAWING NO.	REVISION
1" = 50'	PE-FHA-M-138	0









LEGEND	
	PROPOSED PIPELINE
	LIMITS OF DISTURBANCE
	PROPOSED PERMANENT EASEMENT
	OPERATIONAL CORRIDOR
	PROPOSED TREE LINE
	EXISTING TREE LINE
	WETLAND (SURVEYED)
	WETLAND (PUBLIC)
	WATERBODY (SURVEYED)
	WATERBODY (PUBLIC)
	ACTIVELY DISTURBED AREA (RIPARIAN IMPACT)
	TEMPORARY ACCESS TO PROJECT DISTURBANCE (RIPARIAN IMPACT)
	NEW UTILITY LINE DISTURBANCE (RIPARIAN IMPACT)
	RIPARIAN BUFFER
	25' BUFFER FROM STREAM TOP OF BANK
	STREAM CENTERLINE (SURVEYED)
	STREAM CENTERLINE (PUBLIC)
	LIMITS OF WETLAND DELINEATION
	PROPERTY LINE
	PARCEL ID WITH BLOCK AND LOT NUMBER
	EXISTING CULVERT
	CORRUGATED PLASTIC PIPE
	CORRUGATED METAL PIPE
	HIGH DENSITY POLYETHYLENE PIPE
	POLYVINYL CHLORIDE PIPE
	REINFORCED CONCRETE PIPE
	UNKNOWN
	EXISTING FOREIGN UTILITY EASEMENT
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	EXISTING PIPELINE
	EXISTING OVERHEAD LINE
	EXISTING TREE
	EXISTING FENCE
	STATE OPEN WATER FLAG
	PHOTO LOCATION (SEE REPORT)

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

**THOMAS D. STRONG**  
PROFESSIONAL LAND SURVEYOR  
N.J. LIC. NO. 24GS03676100

SIGNATURE

08/01/2019  
DATE

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

**MICHAEL J. DENICHILO**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 24GE05078700

SIGNATURE

08/01/2019  
DATE

NOTES:  
1. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.  
2. THESE PLANS ARE FOR PERMITTING PURPOSES ONLY. THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION.  
3. WETLAND AND WATERBODY DELINEATION SURVEYS COMPLETED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.  
4. PHOTO LOCATIONS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.  
5. RIPARIAN ZONES AND WETLAND TRANSITION AREAS PROVIDED BY PAULUS, SOKOLOWSKI AND SARTOR (PS&S).  
6. CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MOTT MACDONALD.

REFERENCE DRAWINGS		NO.	
DWG. NO.	TITLE		
000-03-03-079.1	* ACCESS ROAD DETAIL	0	ISSUED FOR NJDEP PERMIT

REVISIONS					APPROVALS			
NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	
0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	RJP	7/2019	
						CHECKED BY	DATE	
						KEK	7/2019	
						ENG. APPROVAL	DATE	
						MJD	7/2019	
						P.M. APPROVAL	DATE	
						MW	7/2019	

APPROVALS		CLIENT APPROVAL	
DRAWN BY	DATE		
RJP	7/2019		
CHECKED BY	DATE		
KEK	7/2019		
ENG. APPROVAL	DATE		
MJD	7/2019		
P.M. APPROVAL	DATE		
MW	7/2019		

PREPARED FOR  
  
PREPARED BY  
**M M**  
MOTT  
MACDONALD  
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830  
CERTIFICATE NO. 24GA28016600

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE FLOOD HAZARD AREA PERMIT PLAN MP 107.9R2 - MP 108.1R2		
SCALE 1" = 50'	DRAWING NO. PE-FHA-M-140	REVISION 0